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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/501,825

07/19/2004

Arnaud Bourge

FR 020002

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02/14/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

ANYIKIRE, CHIKAODILI E

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/501,825	<b>Applicant(s)</b> BOURGE ET AL.	
	<b>Examiner</b> Chikaodili E. Anyikire	<b>Art Unit</b> 2621	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20040719</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This application is responsive to application number (10501825) filed on July 19, 2004. Claims 1-6 are pending and have been examined.

#### *Information Disclosure Statement*

2. Acknowledgement is made of applicant's information disclosure statement filed on July 19, 2004.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim rejected under 35 U.S.C. 102(e) as being anticipated by (US 2002/0101929).

As per **claim 1**, Zheng discloses a video encoding method (Fig 1) for the compression of an original video sequence divided into successive groups of frames (GOFs), said method comprising the steps of:

(1) generating (Fig 1, 100) from the original video sequence, by means of a wavelet decomposition, a low resolution sequence including successive low resolution GOFs (paragraph [0030] Ln 1-2);

(2) performing on said low resolution sequence a low resolution decomposition, by means of a motion compensated spatio-temporal analysis of each low resolution GOF (paragraph [0010], [0030], and [0031]);

(3) generating from said low resolution decomposition a full resolution sequence, by means of an anchoring of the high frequency spatial subbands resulting from the wavelet decomposition to said low resolution decomposition (paragraph [0031] Ln 9-12);

(4) coding said full resolution sequence and the motion vectors generated during the motion compensated spatio-temporal analysis, for generating an output coded bitstream (paragraph [0031] Ln 9-12).

As per **claim 2**, Zheng discloses a method according to claim 1, in which, for each frame, said high spatial subbands are directly anchored to the low resolution subband that, in said spatio-temporal decomposition, looks most like said frame, depending on the motion estimation direction (paragraph [0010], [0030], and [0031]) .

As per **claim 3**, Zheng discloses a method according to claim 1, in which a predictive mode is used to construct the high spatial subbands, said high spatial subbands resulting from a second wavelet decomposition performed on a prediction error obtained from a motion compensation applied to the original video sequence (paragraph [0010], [0030], and [0031]).

As per **claim 4**, An encoding device for the implementation of the video encoding method according to claim 1 (paragraph [0035] Ln 1-6).

As per **claim 5**, Zheng discloses a method for decoding an input bitstream coded by means of an encoding method according to claim 1, said decoding method comprising the steps of:

(1) decoding said input coded bitstream for generating a decoded full resolution sequence and associated decoded motion vectors (paragraph [0030]-[0031]);

(2) in said decoded full resolution sequence, separating the decoded high frequency spatial subbands and the decoded low resolution decomposition (paragraph [0032]);

(3) generating from said decoded low resolution decomposition, by means of motion compensated spatio-temporal synthesis, a decoded low resolution sequence (paragraph [0010] and [0030]-[0032]);

(4) reconstructing from said decoded low resolution sequence and the decoded high frequency spatial subbands an output full resolution sequence corresponding to the original video sequence (paragraph [0032]).

As per **claim 6**, Zheng discloses a decoding device for the implementation of the video decoding method according to claim 5 (paragraph [0035 Ln 1-6]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chikaodili E. Anyikire whose telephone number is (571) 270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CEA

*Marsha D Banks-Harold*

MARSHA D. BANKS-HAROLD  
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